

# SEQUENCE LISTING

<110> Trimeris, Inc.  
 <120> Method for production of antivirals by use of HIV-derived HR1 peptides, and trimers formed therefrom  
 <130> TRM-002  
 <150> 60/414,515  
 <151> 2002-09-27  
 <160> 48  
 <170> PatentIn version 3.2  
 <210> 1  
 <211> 59  
 <212> PRT  
 <213> Human immunodeficiency virus

<400> 1

Thr	Leu	Thr	Val	Gln	Ala	Arg	Gln	Leu	Leu	Ser	Gly	Ile	Val	Gln	Gln
1				5				10						15	

Gln	Asn	Asn	Leu	Leu	Arg	Ala	Ile	Glu	Ala	Gln	Gln	His	Leu	Leu	Gln
			20					25					30		

Leu	Thr	Val	Trp	Gly	Ile	Lys	Gln	Leu	Gln	Ala	Arg	Ile	Leu	Ala	Val
		35					40					45			

Glu	Arg	Tyr	Leu	Lys	Asp	Gln	Leu	Leu	Gly	Ile
	50					55				

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 <211> 38  
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 <213> Artificial

<220>  
 <223> synthesized

<400> 2

Asn	Asn	Leu	Leu	Arg	Ala	Ile	Glu	Ala	Gln	Gln	His	Leu	Leu	Gln	Leu
1				5				10						15	

Thr	Val	Trp	Gly	Ile	Lys	Gln	Leu	Gln	Ala	Arg	Ile	Leu	Ala	Val	Glu
			20					25					30		

Arg Tyr Leu Lys Asp Gln  
35

<210> 3  
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<220>  
<223> synthesized

<400> 3

Gly Ser Thr Met Gly Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg  
1 5 10 15

Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala  
20 25 30

Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr  
35 40

<210> 4  
<211> 54  
<212> PRT  
<213> Artificial

<220>  
<223> synthesized

<400> 4

Gly Ser Thr Met Gly Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg  
1 5 10 15

Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala  
20 25 30

Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys  
35 40 45

Gln Leu Gln Ala Arg Ile  
50

<210> 5  
<211> 36  
<212> PRT  
<213> Artificial

<220>

<223> synthesized

<400> 5

Gly Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser  
1 5 10 15

Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
20 25 30

Gln His Leu Leu  
35

<210> 6

<211> 38

<212> PRT

<213> Artificial

<220>

<223> synthesized

<400> 6

Gly Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser  
1 5 10 15

Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
20 25 30

Gln His Leu Leu Gln Leu  
35

<210> 7

<211> 40

<212> PRT

<213> Artificial

<220>

<223> synthesized

<400> 7

Gly Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser  
1 5 10 15

Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
20 25 30

Gln His Leu Leu Gln Leu Thr Val  
35 40

<210> 8  
<211> 50  
<212> PRT  
<213> Artificial

<220>  
<223> synthesized

<400> 8

Gly Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser  
1 5 10 15

Gly Ile Val Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
20 25 30

Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala  
35 40 45

Arg Ile  
50

<210> 9  
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<213> Artificial

<220>  
<223> synthesized

<400> 9

Ala Arg Ser Met Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly  
1 5 10 15

Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln  
20 25 30

His Leu Leu Gln  
35

<210> 10  
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<223> synthesized

<400> 10

Arg	Ser	Met	Thr	Leu	Thr	Val	Gln	Ala	Arg	Gln	Leu	Leu	Ser	Gly	Ile
1				5					10					15	

Val	Gln	Gln	Gln	Asn	Asn	Leu	Leu	Arg	Ala	Ile	Glu	Ala	Gln	Gln	His
			20					25					30		

Leu	Leu	Gln	Leu
			35

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<211> 36

<212> PRT

<213> Artificial

<220>

<223> synthesized

<400> 11

Ser	Met	Thr	Leu	Thr	Val	Gln	Ala	Arg	Gln	Leu	Leu	Ser	Gly	Ile	Val
1				5					10					15	

Gln	Gln	Gln	Asn	Asn	Leu	Leu	Arg	Ala	Ile	Glu	Ala	Gln	Gln	His	Leu
			20					25					30		

Leu	Gln	Leu	Thr
			35

<210> 12

<211> 35

<212> PRT

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<220>

<223> synthesized

<400> 12

Met	Thr	Leu	Thr	Val	Gln	Ala	Arg	Gln	Leu	Leu	Ser	Gly	Ile	Val	Gln
1				5					10					15	

Gln	Gln	Asn	Asn	Leu	Leu	Arg	Ala	Ile	Glu	Ala	Gln	Gln	His	Leu	Leu
			20					25					30		

Gln Leu Thr  
35

<210> 13  
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<220>  
<223> synthesized

<400> 13

Met Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln  
1 5 10 15

Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu  
20 25 30

Gln Leu Thr Val  
35

<210> 14  
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<220>  
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<400> 14

Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln  
1 5 10 15

Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
20 25 30

Leu Thr

<210> 15  
<211> 35  
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<220>  
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<400> 15

Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln  
1 5 10 15

Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
20 25 30

Leu Thr Val  
35

<210> 16  
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<212> PRT  
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<220>  
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<400> 16

Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln  
1 5 10 15

Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
20 25 30

Leu Thr Val Trp  
35

<210> 17  
<211> 37  
<212> PRT  
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<223> synthesized

<400> 17

Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln  
1 5 10 15

Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
20 25 30

Leu Thr Val Trp Gly  
35

<210> 18  
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<212> PRT  
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<220>  
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<400> 18

Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln  
1 5 10 15

Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
20 25 30

Leu Thr Val Trp Gly Ile  
35

<210> 19  
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<400> 19

Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln  
1 5 10 15

Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
20 25 30

Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg  
35 40

<210> 20  
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<400> 20

Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln  
1 5 10 15



Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
20 25 30

Thr Val Trp Gly  
35

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<212> PRT  
<213> Artificial

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<400> 21

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
35 40

<210> 22  
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<212> PRT  
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<220>  
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<400> 22

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
35 40 45

<210> 23  
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<400> 23

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys

<210> 24

<211> 51

<212> PRT

<213> Artificial

<220>

<223> synthesized

<400> 24

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys Asp Gln  
50

<210> 25

<211> 36

<212> PRT

<213> Artificial

<220>

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<400> 25

Ser Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala  
1 5 10 15

Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln  
20 25 30

Ala Arg Ile Leu  
35

<210> 26  
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<400> 26

Ser Gly Ile Val Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala  
1 5 10 15

Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln  
20 25 30

Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40 45

<210> 27  
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<220>  
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<400> 27

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 28  
<211> 34  
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<400> 28

Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly  
1 5 10 15

Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
20 25 30

Asp Gln

<210> 29  
<211> 41  
<212> PRT  
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<220>  
<223> synthesized

<400> 29

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Ala Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 30  
<211> 41  
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<400> 30

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Val Ala Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 31  
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<212> PRT  
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<400> 31

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Phe  
20 25 30

Gly Ile Arg Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys

<210> 32  
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<212> PRT  
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<220>  
<223> synthesized

<400> 32

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Ala Leu Gln Ala Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys

<210> 33  
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<400> 33

Trp Met Glu Trp Asp Arg Glu Ile Asn Asn Tyr Thr Ser Leu Ile His  
1 5 10 15

Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
20 25 30

Leu Leu Glu Leu  
35

<210> 34  
<211> 51  
<212> PRT  
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<400> 34

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Ala Leu Gln Ala Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys Asp Gln  
50

<210> 35  
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<400> 35

Gln Ala Arg Gln Leu Val Ser Gly Leu Val Gln Gln Gln Asn Asn Ile  
1 5 10 15

Leu Arg Ala Leu Glu Ala Thr Gln His Ala Val Gln Ala Leu Val Trp  
20 25 30

Gly Val Lys Gln Leu Gln Ala Arg Val Leu Ala Leu Glu Arg Tyr Ile  
35 40 45

Lys

<210> 36

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<400> 36

Gln Ile Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Ile Gln His Ala Leu Gln Ala Ile Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys

<210> 37

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<400> 37

Gln Ala Arg Gln Leu Val Ser Gly Leu Val Gln Gln Gln Asn Asn Ile  
1 5 10 15

Leu Arg Ala Leu Glu Ala Thr Gln His Ala Val Gln Ala Leu Val Trp  
20 25 30

Gly Val Arg Gln Leu Gln Ala Arg Val Leu Ala Leu Glu Arg Tyr Ile  
35 40 45

Lys

<210> 38  
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<400> 38

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Thr Gln His Ala Val Gln Ala Leu Val Trp  
20 25 30

Gly Val Lys Gln Leu Gln Ala Arg Val Leu Ala Leu Glu Arg Tyr Ile  
35 40 45

Lys Asp Gln  
50

<210> 39  
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<400> 39

Gln Ala Arg Gln Leu Val Ser Gly Leu Val Gln Gln Gln Asn Asn Ile  
1 5 10 15

Leu Arg Ala Leu Glu Ala Gln Gln His Ala Leu Gln Ala Thr Val Trp



20

25

30

Gly Ile Lys Gln Leu Gln Ala Arg Val Leu Ala Leu Glu Arg Tyr Ile  
 35 40 45

Lys Asp Gln  
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<210> 40  
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<400> 40

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
 1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Ala Leu Gln Ala Thr Val Trp  
 20 25 30

Gly Val Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
 35 40 45

Lys Asp Gln  
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<210> 41  
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<400> 41

Gln Ala Arg Gln Leu Val Ser Gly Leu Val Gln Gln Gln Asn Asn Ile  
 1 5 10 15

Leu Arg Ala Leu Glu Ala Thr Gln His Leu Val Gln Leu Leu Val Trp  
 20 25 30

Gly Val Lys Gln Leu Gln Ala Arg Val Leu Ala Leu Glu Arg Tyr Ile  
 35 40 45

Lys

<210> 42  
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<212> PRT  
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<220>  
<223> synthesized

<400> 42

Gln Ile Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Ile Gln His Leu Leu Gln Leu Ile Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys

<210> 43  
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<400> 43

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Val Phe Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 44  
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<400> 44

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Val Trp Gly Ile Ala Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 45

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<400> 45

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Ala Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 46

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<220>

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<400> 46

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Ala  
1 5 10 15

Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40

<210> 47  
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<212> PRT  
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<400> 47

Gln Ala Arg Gln Leu Leu Ser Gly Ile Val Gln Gln Gln Asn Asn Leu  
1 5 10 15

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Ala Thr Val Trp  
20 25 30

Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
35 40 45

Lys Asp Gln  
50

<210> 48  
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<212> PRT  
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<400> 48

Gln Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10 15

Leu Gln Ala Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
20 25 30

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
35 40